



4910-06-P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA-1999-6439, Notice No. 26]

Adjustment of Nationwide Significant Risk Threshold

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of Adjustment of Nationwide Significant Risk Threshold.

SUMMARY: FRA is updating the Nationwide Significant Risk Threshold (NSRT) for purposes of FRA's regulation on the Use of Locomotive Horns at Public Highway-Rail Grade Crossings. This action is needed to ensure the public has the proper permissible risk threshold to evaluate risk resulting from prohibiting routine locomotive horn sounding at highway-rail grade crossings located in quiet zones. This is the eighth update to the NSRT and it is decreasing from 14,723 to 13,811.

DATES: The applicable date of this notice is [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: Mr. Larry Woolverton, Office of Railroad Safety, FRA, 1200 New Jersey Avenue, SE, Washington, DC 20590, (202) 493-6212, Larry.Woolverton@dot.gov; or Ms. Kathryn Gresham, Office of Chief Counsel, FRA, 1200 New Jersey Avenue, SE, Washington, DC 20590, (202) 493-6063, Kathryn.Gresham@dot.gov.

SUPPLEMENTARY INFORMATION:

Background

The NSRT is an average of the risk indexes for gated public crossings nationwide where train horns are routinely sounded. FRA developed this risk index to serve as one threshold of permissible risk for quiet zones established across the nation under 49 CFR part 222, Use of Locomotive Horns at Public Highway-Rail Grade Crossings. Thus, a community trying to establish and/or maintain its quiet zone, under 49 CFR part 222, can compare the Quiet Zone Risk Index calculated for its specific crossing corridor to the NSRT to determine whether sufficient measures have been taken to compensate for the excess risk that results from prohibiting routine sounding of the locomotive horn. In the alternative, a community can establish its quiet zone in comparison to the Risk Index With Horns, which is defined in 49 CFR 222.9 as a measure of risk to the motoring public when locomotive horns are routinely sounded at every public highway-rail grade crossing within a quiet zone.

FRA has periodically updated the NSRT since 2006. FRA last updated the NSRT in 2017 to be 14,723. 82 FR 19138, Apr. 25, 2017.

New NSRT

Using collision data over a 5-year period from 2013 to 2017, FRA has recalculated the NSRT based on formulas identified in 49 CFR part 222, appendix D. In making this recalculation, FRA noted the total number of gated crossings nationwide where train horns are routinely sounded was 47,289.

$$\text{Fatality Rate} = \frac{\frac{\text{Fatalities}}{\text{Fatal Incidents}}}{\frac{\text{Injuries in Injury-Only Incidents}}{1035}} = \frac{\frac{289}{235}}{1035} = 1.2298$$

$$\text{Injury Rate} = \frac{\text{Injury-Only Incidents}}{\text{Total Crossings}} = \frac{673}{437,000} = 1.5379$$

Applying the fatality rate and injury rate to the probable number of fatalities and injuries predicted to occur at each of the 47,289 identified crossings, and the predicted cost of the associated injuries and fatalities, FRA calculates the NSRT is 13,811.

Accordingly, this updated NSRT value will serve as one threshold of permissible risk for quiet zones established across the nation pursuant to 49 CFR part 222.

John Karl Alexy,
Acting Associate Administrator for Railroad Safety
and Chief Safety Officer.